Differently - Tuned VCO Using Inductively Coupled Varactors

ABSTRACT

A differently-tuned voltage controlled oscillator (VCO) and its application in a

multi-band VCO tuner are disclosed. In one aspect of the invention, the VCO comprises
a plurality of serially connected inductive elements each including inductively coupled
inductor elements, a varactor element connected in parallel with the serially connected
first inductor elements and means to apply a first and second tuning voltage to elements
of the varactor element. In a second aspect, the VCO further comprises a second
varactor element connected in parallel with the inductive elements, and means to apply
the second tuning voltage elements of the second varactor element.